



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,116	06/27/2003	Helmut W. Kucera	IR-3332(CRD)	9257
7590 08/10/2005			EXAMINER	
LORD CORPORATION 111 Lord Drive P.O. 8012 Cary, NC 27512-8012			TUROCY, DAVID P	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/609,116

Applicant(s)

KUCERA ET AL.

Examiner

David Turocy

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13, 15-28 and 30-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-28 and 30-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/14/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Response to Amendment***

1. The applicant's amendments, dated 6/13/2005, have been fully considered and reviewed by the examiner. In light of the amendment to the claims, the objection has been withdrawn. In addition, in light of the submission of the oath, dated 7/20/2005, the objection for a defective oath has been withdrawn. The examiner notes the amendments to the claims, the cancellation of claims 14 and 29 and the addition of new claim 34. Claims 1-13, 15-28, and 30-34 are pending.

### ***Response to Arguments***

2. Applicant's arguments filed 6/13/2005 have been fully considered but they are not persuasive.

The applicant has argued against the combination of Kucera and Brewer stating the two references are not analogous art because Kucera teaches of dipping a substrate in an aqueous dispersion and Brewer teaches of dipping in a tinning process. The applicant argues that for two references to be analogous, when they are not in the same field of endeavor, the references have to be pertinent to a particular problem with which the inventor was concerned and states the problems associated with the polymer dispersion in no way relates to the problems associated to tinning. The examiner respectfully disagrees. Both Kucera and Brewer are faced with the problem of immersing a substrate in a multiple solutions and Brewer discloses using an articulative electromechanical device to aid in the immersion process would increase the production

Art Unit: 1762

facility. While Brewer teaches of a tinning process, Brewer suggests to one of ordinary skill in the immersion art that providing an articulative electromechanical device when immersing a substrate in consecutive baths increase the efficiency. Therefore, taking the references collectively, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kucera to use the articulative electromechanical device as suggested by Brewer to reap the benefits of a more efficient process with a reasonably expectation of successfully immersing a substrate in an aqueous dispersion. Please note that the test of obviousness is not an express suggestion of the claimed invention in any or all references, but rather what the references taken collectively would suggest to those of ordinary skill in the art presumed to be familiar with them (*In re Rosselet*, 146 USPQ 183).

The applicant also argues the Brewer reference only articulates the substrate after complete solidification and does not articulation with a wet film and has no technical objective than to reorient the substrate for the next dipping. However, such an argument is not commensurate in scope with the claims, where the claims do not require the film to be wet during the articulation. In addition the examiner notes the definition of articulate, as defined by the applicant at specification page 11, is in the broadest definition "motion, such as movement from a first point to a second point", where moving a substrate from one point to another, whether a small displacement or in a straight line, circle, etc. reads on the claim limitation. Therefore moving the substrate to reorient the substrate for immersion reads on articulation.

The applicant has argued against the Kucera and Brewer reference stating neither reference teaches of a substrate displacing at least 0.25% of the volume of the bath and a bath turnover of 1 hour to 5 days. In addition the applicant argues the prior art references do not disclose any modifications to the geometry of the bath with the surface area of the substrate. Such an argument is not commensurate in scope with the claims. The claims only require immersing a substrate in an immersion bath with an articulative electromechanical device and do not require any certain geometry of the bath relative to the surface area of the substrate. Therefore, since the prior art references teach all the same process steps, i.e. require immersing a substrate in an immersion bath with an articulative electromechanical device, as set forth above and in the office action dated 12/8/2004, the immersion process as taught by Kucera in view of Brewer must result in the displaced volume and bath turnover. Either 1) the applicant and the prior art have different definitions for immersing a substrate in a bath with an articulative electromechanical device, or 2) the applicant is using other process steps or parameters that are not shown in the claims.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1762

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-3, 5-11, 12-13, 15-16, 19-21, 23-26, and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/43131 by Kucera et al. ("Kucera") in view of US Patent 4766844 by Brewer et al ("Brewer").

These claims are rejected for the same reasons as set forth in the office action dated 12/8/2004 as well as for the reasons set forth in section 2 above.

6. Claims 4, 15, 22, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/43131 by Kucera et al. ("Kucera") in view of US Patent 4766844 by Brewer et al ("Brewer") and further in view of US Patent 4657788 by Benton et al ("Benton").

These claims are rejected for the same reasons as set forth in the office action dated 12/8/2004 as well as for the reasons set forth in section 2 above.

7. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/43131 by Kucera et al. ("Kucera") in view of US Patent 4766844 by Brewer et al ("Brewer") and US Patent 4657788 by Benton et al ("Benton") and further in view of US Patent 4103049 by Nishida et al ("Nishida").

These claims are rejected for the same reasons as set forth in the office action dated 12/8/2004 as well as for the reasons set forth in section 2 above.

8. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 00/43131 by Kucera et al. ("Kucera") in view of US Patent 4766844 by Brewer et al ("Brewer") and further in view of US Patent 4103049 by Nishida et al ("Nishida").

These claims are rejected for the same reasons as set forth in the office action dated 12/8/2004 as well as for the reasons set forth in section 2 above.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Turocy whose telephone number is (571) 272-2940. The examiner can normally be reached on Monday-Friday 8:30-6:00, No 2nd Friday.

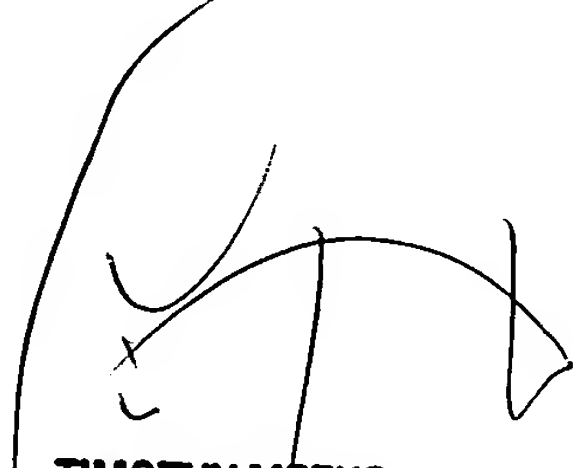
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 1762

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Turocy  
Au 1762



**TIMOTHY MEEKS**  
**SUPERVISORY PATENT EXAMINER**